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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,714	05/24/2004	Cheng-Hsien Lu	ACMP0045USA	3713
27765	7590	07/02/2007		
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			EXAMINER SELBY, GEVELL V	
			ART UNIT 2622	PAPER NUMBER
			NOTIFICATION DATE 07/02/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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mis.ap.uspto@naipo.com.tw

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/709,714	LU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Gevell Selby	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1,2 4, 5, 7, 9-11, 13, 14, 16, 17, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Segawa et al., US 2002/0057468.**

In regard to claim 1, Segawa et al., US 2002/0057468, discloses an optical module for a digital camera, the optical module comprising:

- a substrate (see figure 1, element 1);
- a light sensor installed on the substrate for sensing light (see figure 1, element 7);
- a lens holder mounted on the light sensor (see figure 1, element 13);
- a light shield disposed at a position between a top surface of the substrate and a bottom end of the lens holder(see figure 1, element 8); and
- a lens installed on the lens holder for focusing light onto the light sensor (see figure 1, element 5).

In regard to claim 2, Segawa et al., US 2002/0057468, discloses the optical module of claim 1, wherein the light shield is resilient (see para 31).

In regard to claim 4, Segawa et al., US 2002/0057468, discloses the optical module of claim 1 further comprising at least a fixing device (see figure 4, element 16) fastened into the substrate and fixing the lens holder to the substrate.

In regard to claim 5, Segawa et al., US 2002/0057468, discloses the optical module of claim 4, wherein the fixing device is a screw (see para.54).

In regard to claim 7, Segawa et al., US 2002/0057468, discloses the optical module of claim 4 further comprising at least a cushion (see figure 2, elements 8 and 15) disposed between the fixing device and the substrate for reducing impact of the fixing device against the substrate.

In regard to claim 9, Segawa et al., US 2002/0057468, discloses the optical module of claim 7, wherein the cushion comprises at least a spring (see para. 34).

In regard to claim 10, Segawa et al., US 2002/0057468, discloses the optical module of claim 1, wherein the light sensor is a complementary metal oxide semiconductor (CMOS) sensor (see para. 30) and the substrate is a printed circuit board (see para 28).

In regard to claim 11, Segawa et al., US 2002/0057468, discloses an optical module for a digital camera, the optical module comprising:

- a substrate (see figure 1, element 1);
- a light sensor installed on the substrate for sensing light (see figure 1, element 7);
- a lens holder mounted on the light sensor (see figure 1, element 13);

a fixing device (see figure 4, element 16) fastened into the substrate and fixing the lens holder to the substrate;

a cushion (see figure 2, elements 8 and 15) installed between the fixing device and the substrate for reducing impact of the fixing device against the substrate; and

a lens installed on the lens holder for focusing light onto the light sensor (see figure 1, element 5).

In regard to claim 13, Segawa et al., US 2002/0057468, discloses the optical module of claim 11, wherein the cushion comprises at least a spring (see para. 34).

In regard to claim 14, Segawa et al., US 2002/0057468, discloses the optical module of claim 11, wherein the fixing device is a screw (see para.54).

In regard to claim 16, Segawa et al., US 2002/0057468, discloses the optical module of claim 11 further comprising a light shield (see figure 2, element 8) disposed at a position between a top surface of the substrate and a bottom end of the lens holder.

In regard to claim 17, Segawa et al., US 2002/0057468, discloses the optical module of claim 16, wherein the light shield is resilient (see para 31).

In regard to claim 19, Segawa et al., US 2002/0057468, discloses the optical module of claim 11, wherein the light sensor is a complementary metal oxide semiconductor (CMOS) sensor (see para. 30) and the substrate is a printed circuit board (see para 28).

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 3, 8, 12, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Segawa et al., US 2002/0057468 in view of Meek et al., US 6,741,286.**

In regard to claims 3, 8, 12, and 18, Segawa et al., US 2002/0057468, discloses the optical module of claims 2, 7, 11, and 17. The Segawa reference does not disclose wherein a light shield and a cushion is a rubber pad.

Meek et al., US 6,741,286, discloses a camera wherein the light shield and cushion is a rubber pad (see figure 1, element 13 and column 2, lines 33-39).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Segawa et al., US 2002/0057468 in view of Meek et al., US 6,741,286, wherein the light shield and cushion is a rubber pad, in order to seal the lens cover to the image sensor.

In regard to claim 20, Segawa et al., US 2002/0057468, discloses the optical module of claim 16. The Segawa reference does not disclose wherein the cushion has an elastic constant smaller than that of the light shield.

Meek et al., US 6,741,286, discloses a camera wherein the light shield and cushion is a rubber pad (see figure 1, element 13 and column 2, lines 33-39).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Segawa et al., US 2002/0057468 in view of Meek et al., US 6,741,286, wherein the light shield and cushion is a rubber pad, in order to seal the lens cover to the image sensor. Therefore, the metallic cushion will have an elastic constant smaller than that of the rubber light shield.

**5. Claims 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Segawa et al., US 2002/0057468.**

In regard to claims 6 and 15, Segawa et al., US 2002/0057468, discloses the optical module of claim 4. Segawa discloses in another embodiment wherein the fixing device comprises an elastic hook (see figure 12A, element 244).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Segawa et al., US 2002/0057468, to have wherein the fixing device comprises an elastic hook, in order to guide the lens holder onto the unit and easily secure it in the proper place.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 7,088,397, discloses an image sensor with a lens holder that is connected with clips.

US 6,424,472, discloses a lens assembly with a spring.

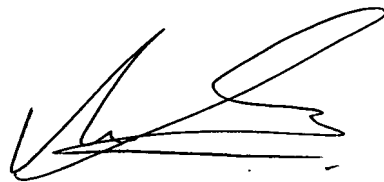
Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Gevell Selby whose telephone number is 571-272-7369. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on 571-272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

gvs



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